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ALL	19 not 17	9	<u>L10</u> <i>checked</i>
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ALL	synthetic adj2 gene [clm]	35	<u>L8</u>
ALL	16 and codon [clm]	24	<u>L7</u> <i>checked</i>
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ALL	14 and efficiency	473	<u>L5</u>
ALL	13 and @AD<=19960920	793	<u>L4</u>
ALL	12 and (replace or replacing or substitute or substituting)	1027	<u>L3</u>
ALL	((codon adj bias) or (codon adj preference) or (codon adj usage) or (codon adj optimization))	2114	<u>L2</u>
ALL	((codon adj bias) or (codon adj preference) or (codon adj usage) or codon adj optimization)	2114	<u>L1</u>

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Entry 1 of 24

File: USPT

Jan 18, 2000

US-PAT-NO: 6015891

DOCUMENT-IDENTIFIER: US 6015891 A

TITLE: Synthetic insecticidal crystal protein gene having a modified frequency of codon usage

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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2. Document ID: US 6013523 A

Entry 2 of 24

File: USPT

Jan 11, 2000

US-PAT-NO: 6013523

DOCUMENT-IDENTIFIER: US 6013523 A

TITLE: Transgenic plants comprising a synthetic insecticidal crystal protein gene having a modified frequency of codon usage

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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3. Document ID: US 5952547 A

Entry 3 of 24

File: USPT

Sep 14, 1999

US-PAT-NO: 5952547

DOCUMENT-IDENTIFIER: US 5952547 A

TITLE: Modified Bacillus thuringiensis genes with improved expression in plant cells, methods of production on and use

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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4. Document ID: US 5939318 A

Entry 4 of 24

File: USPT

Aug 17, 1999

US-PAT-NO: 5939318

DOCUMENT-IDENTIFIER: US 5939318 A

TITLE: Cholesterol disposal fusion enzymes

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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5. Document ID: US 5891664 A

Entry 5 of 24

File: USPT

Apr 6, 1999

US-PAT-NO: 5891664
DOCUMENT-IDENTIFIER: US 5891664 A
TITLE: Vectors and methods for recombinant production of uPA-binding fragments of the human urokinase-type plasminogen receptor (uPAR)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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6. Document ID: US 5877306 A

Entry 6 of 24

File: USPT

Mar 2, 1999

US-PAT-NO: 5877306
DOCUMENT-IDENTIFIER: US 5877306 A
TITLE: Modified Bacillus thuringiensis insecticidal-crystal protein genes and their expression in plant cells

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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7. Document ID: US 5874282 A

Entry 7 of 24

File: USPT

Feb 23, 1999

US-PAT-NO: 5874282
DOCUMENT-IDENTIFIER: US 5874282 A
TITLE: Purified DNA polymerase from Bacillus stearothermophilus ATTC 12980

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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8. Document ID: US 5874304 A

Entry 8 of 24

File: USPT

Feb 23, 1999

US-PAT-NO: 5874304
DOCUMENT-IDENTIFIER: US 5874304 A
TITLE: Humanized green fluorescent protein genes and methods

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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9. Document ID: US 5795737 A

Entry 9 of 24

File: USPT

Aug 18, 1998

US-PAT-NO: 5795737
DOCUMENT-IDENTIFIER: US 5795737 A
TITLE: High level expression of proteins

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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10. Document ID: US 5786464 A

Entry 10 of 24

File: USPT

Jul 28, 1998

US-PAT-NO: 5786464
DOCUMENT-IDENTIFIER: US 5786464 A
TITLE: Overexpression of mammalian and viral proteins

500d

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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Entry 11 of 24

File: USPT

Sep 23, 1997

US-PAT-NO: 5670356

DOCUMENT-IDENTIFIER: US 5670356 A

TITLE: Modified luciferase

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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12. Document ID: US 5670333 A

Entry 12 of 24

File: USPT

Sep 23, 1997

US-PAT-NO: 5670333

DOCUMENT-IDENTIFIER: US 5670333 A

TITLE: Expression of polypeptides in E. coli under control of the E. coli MDH-gene promoter

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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13. Document ID: US 5654177 A

Entry 13 of 24

File: USPT

Aug 5, 1997

US-PAT-NO: 5654177

DOCUMENT-IDENTIFIER: US 5654177 A

TITLE: Production of human somatomedin C

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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14. Document ID: US 5654147 A

Entry 14 of 24

File: USPT

Aug 5, 1997

US-PAT-NO: 5654147

DOCUMENT-IDENTIFIER: US 5654147 A

TITLE: Method of hybridization using oligonucleotide probes

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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15. Document ID: US 5633446 A

Entry 15 of 24

File: USPT

May 27, 1997

US-PAT-NO: 5633446
DOCUMENT-IDENTIFIER: US 5633446 A
TITLE: Modified Bacillus thuringiensis insecticidal-crystal protein genes and their expression in plant cells

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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16. Document ID: US 5624827 A

Entry 16 of 24

File: USPT

Apr 29, 1997

US-PAT-NO: 5624827
DOCUMENT-IDENTIFIER: US 5624827 A
TITLE: DNA sequences encoding the plant toxin gelonin

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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17. Document ID: US 5589615 A

Entry 17 of 24

File: USPT

Dec 31, 1996

US-PAT-NO: 5589615
DOCUMENT-IDENTIFIER: US 5589615 A
TITLE: Process for the production of transgenic plants with increased nutritional value via the expression of modified 2S storage albumins

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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18. Document ID: US 5567862 A

Entry 18 of 24

File: USPT

Oct 22, 1996

US-PAT-NO: 5567862
DOCUMENT-IDENTIFIER: US 5567862 A
TITLE: Synthetic insecticidal crystal protein gene

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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19. Document ID: US 5567600 A

Entry 19 of 24

File: USPT

Oct 22, 1996

US-PAT-NO: 5567600
DOCUMENT-IDENTIFIER: US 5567600 A
TITLE: Synthetic insecticidal crystal protein gene

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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20. Document ID: US 5500365 A

Entry 20 of 24

File: USPT

Mar 19, 1996

US-PAT-NO: 5500365
DOCUMENT-IDENTIFIER: US 5500365 A
TITLE: Synthetic plant genes

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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Entry 21 of 24

File: USPT

Jan 10, 1995

US-PAT-NO: 5380831

DOCUMENT-IDENTIFIER: US 5380831 A

TITLE: Synthetic insecticidal crystal protein gene

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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22. Document ID: US 5242811 A

Entry 22 of 24

File: USPT

Sep 7, 1993

US-PAT-NO: 5242811

DOCUMENT-IDENTIFIER: US 5242811 A

TITLE: Production of human somatomedin C

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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23. Document ID: US 5223408 A

Entry 23 of 24

File: USPT

Jun 29, 1993

US-PAT-NO: 5223408

DOCUMENT-IDENTIFIER: US 5223408 A

TITLE: Method for making variant secreted proteins with altered properties

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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24. Document ID: US 5013652 A

Entry 24 of 24

File: USPT

May 7, 1991

US-PAT-NO: 5013652

DOCUMENT-IDENTIFIER: US 5013652 A

TITLE: Composite yeast vectors

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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16 and codon [clm]

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Full Title Citation Front Review Classification Date Reference Claims KMC

Document Number 21

Entry 21 of 24

File: USPT

Jan 10, 1995

US-PAT-NO: 5380831

DOCUMENT-IDENTIFIER: US 5380831 A

TITLE: Synthetic insecticidal crystal protein gene

DATE-ISSUED: January 10, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Adang; Michael J.	Madison	WI	N/A	N/A
Rocheleau; Thomas A.	Madison	WI	N/A	N/A
Merlo; Donald J.	Madison	WI	N/A	N/A
Murray; Elizabeth E.	Madison	WI	N/A	N/A

US-CL-CURRENT: 536/23.71; 435/69.1, 435/91.1, 435/91.5, 435/91.52

CLAIMS:

We claim:

1. A method of designing a synthetic *Bacillus thuringiensis* gene to be more highly expressed in plants, comprising the steps of: analyzing the coding sequence of a gene derived from a *Bacillus thuringiensis* which encodes an insecticidal protein toxin, and modifying a portion of said coding sequence to yield a modified sequence which contains a greater number of codons preferred by the intended plant host than did said coding sequence.
2. The method of claim 1 further comprising the step of modifying a portion of said coding sequence to eliminate CUUCGG hairpins.
3. The method of claim 1 further comprising the step of modifying a portion of said coding sequence to yield CG and TA doublet avoidance indices which more closely resemble those of the intended plant host.
4. The method of claim 1 further comprising the step of modifying a portion of said coding sequence to eliminate plant polyadenylation signals.
5. The method of claim 1 further comprising the step of modifying a portion of said coding sequence to eliminate polymerase II termination sequences.
6. The method of claim 1 further comprising the step of modifying a portion of said coding sequence to eliminate plant consensus splice sites.
7. The method of claim 1 further comprising the step of modifying a portion of said coding sequence to yield a sequence containing a plant translation initiation sequence at the 5' end of the coding region.
8. The method of claim 4, wherein said plant polyadenylation signal is selected from the group consisting of AATAAA, AATGAA, AATAAT, AATATT, GATAAA, and AATAAG.
9. The method of claim 5, wherein the polymerase II termination sequence is CAN.sub.7-9 AGTNNA.
10. The method of claim 6, wherein the plant consensus splice site is selected from the group consisting of 5'=AAG:GTAAGT and 3'=TTTT(Pu)TTT(Pu)T(Pu)T(Pu)TGCAAG:C.
11. A method of designing a synthetic *Bacillus thuringiensis* gene to be more highly expressed in plants, comprising the steps of: analyzing

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Entry 22 of 24

File: USPT

Sep 7, 1993

US-PAT-NO: 5242811

DOCUMENT-IDENTIFIER: US 5242811 A

TITLE: Production of human somatomedin C

DATE-ISSUED: September 7, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Buell; Gary N.	Geneva	N/A	N/A	CHX
Movva; Nageswararao	Geneva	N/A	N/A	CHX

US-CL-CURRENT: 435/69.7; 435/252.3, 435/252.33, 435/320.1, 435/488,
435/69.1, 435/69.4, 536/23.1, 536/23.4, 536/23.51

CLAIMS:

We claim:

1. A process for improving the production of SMC in an E.coli host transformed with a DNA sequence coding for SMC and operatively linked to a P.sub.L promoter derived from bacteriophage .lambda. comprising the steps of replacing a DNA sequence encoding a portion of the N-terminal end of .beta.-galactosidase with a degenerate series of DNA sequences encoding amino acids 2-6 of SMC; expressing the resulting series of hybrid DNA sequences operatively linked to a lac promoter in an E.coli host; selecting the particular hybrid DNA sequences that enable the optimal production of the hybrid polypeptide; and employing those selected DNA sequences that code for the N-terminal portion of SMC in the expression of SMC; wherein said selected DNA sequences are selected from the group consisting of the DNA inserts of pLC24muSMC 1 through pLC24muSMC 10.
2. A DNA sequence encoding SMC produced by a process comprising the steps of replacing a DNA sequence encoding a portion of the N-terminal end of .beta.-galactosidase with a degenerate series of DNA sequences encoding amino acids 2-6 of SMC; expressing the resulting series of hybrid DNA sequences operatively linked to a lac promoter in an E.coli host; selecting the particular hybrid DNA sequences that enable the optimal production of the hybrid polypeptide; and replacing a portion of a DNA sequence encoding the N-terminal end 3' to the initiation codon of SMC with those selected DNA sequences that code for the N-terminal portion of SMC; wherein said selected DNA sequences are selected from the group consisting of the DNA inserts of pLC24muSMC 1 through pLC24muSMC 10.
3. A recombinant DNA molecule, selected from the group consisting of pLC24muSMC 1 through pLC24muSMC 10.
4. An E.coli host transformed by a recombinant DNA molecule according to claim 3.
5. The transformed host according to claim 4, wherein said host is E.coli HB101 (pcIA57) (pLC24muSMC 8).

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File: USPT

Aug 18, 1998

US-PAT-NO: 5795737

DOCUMENT-IDENTIFIER: US 5795737 A

TITLE: High level expression of proteins

DATE-ISSUED: August 18, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Seed; Brian	Boston	MA	N/A	N/A
Haas; Jurgen	Schriesheim	N/A	N/A	DEX

US-CL-CURRENT: 435/69.1; 435/183, 435/252.3, 435/254.11, 435/254.2, 536/23.1, 536/23.5

CLAIMS:

What is claimed is:

1. A synthetic gene encoding a green fluorescent protein, wherein at least one non-preferred or less preferred codon in the natural gene encoding said protein has been replaced by a preferred codon encoding the same amino acid, said preferred codons being selected from the group consisting of gcc, cgc, aac, gac, tgc, cag, ggc, cac, atc, ctg, aag, ccc, ttc, agc, acc, tac, and gtg, said less preferred codons being selected from the group consisting of ggg, att, ctc, tcc, and gtc, said non-preferred codons being all codons other than said preferred codons and said less preferred codons, wherein said synthetic gene permits the expression of said green fluorescent protein in a mammalian host cell at a level which is at least 110% of that expressed by said natural gene in an in vitro mammalian cell culture system under identical conditions.
2. The synthetic gene of claim 1 wherein said synthetic gene permits the expression of said green fluorescent protein in a mammalian host cell at a level which is at least 150% of that expressed by said natural gene in an in vitro mammalian cell culture system under identical conditions.
3. The synthetic gene of claim 1 wherein said synthetic gene permits the expression of said green fluorescent protein in a mammalian host cell at a level which is at least 200% of that expressed by said natural gene in an in vitro mammalian cell culture system under identical conditions.
4. The synthetic gene of claim 1 wherein said synthetic gene permits the expression of said green fluorescent protein in a mammalian host cell at a level which is at least 500% of that expressed by said natural gene in an in vitro mammalian cell culture system under identical conditions.
5. The synthetic gene of claim 1 wherein said synthetic gene permits the expression of said green fluorescent protein in a mammalian host cell at a level which is at least ten times that expressed by said natural gene in an in vitro mammalian cell culture system under identical conditions.
6. The synthetic gene of claim 1 wherein at least 10% of the codons in said natural gene are non-preferred codons.

7. The synthetic gene of claim 6 wherein at least 50% of the codons in said natural gene are non-preferred codons.
8. The synthetic gene of claim 1 wherein at least 50% of the non-preferred codons and less preferred codons present in said natural gene have been replaced by preferred codons.
9. The synthetic gene of claim 1 wherein at least 90% of the non-preferred codons and less preferred codons present in said natural gene have been replaced by preferred codons.
10. A method for preparing a synthetic gene encoding a green fluorescent protein, comprising identifying non-preferred and less preferred codons in the natural gene encoding said protein and replacing one or more of said non-preferred and less preferred codons with a preferred codon encoding the same amino acid as the replaced codon, said preferred codons being selected from the group consisting of gcc, cgc, aac, gac, tgc, cag, ggc, cac, atc, ctg, aag, ccc, ttc, agc, acc, tac, and gtg, said less preferred codons being selected from the group consisting of ggg, att, etc, tcc, and gtc, said non-preferred codons being all codons other than said preferred codons and said less preferred codons, wherein said synthetic gene permits the expression of said green fluorescent protein in a mammalian host cell at a level which is at least 110% of that expressed by said natural gene in an in vitro mammalian cell culture system under identical conditions.
11. The synthetic gene of claim 1 wherein said synthetic gene permits the expression of said green fluorescent protein in a mammalian host cell at a level which is at least 1000% of that expressed by said natural gene in an in vitro mammalian cell culture system under identical conditions.
12. The synthetic gene of claim 1 having the sequence depicted in FIG. 11 (SEQ ID NO:40).
13. An expression plasmid comprising the synthetic gene of claim 1.
14. A mammalian cell-transfected with the expression plasmid of claim 13.

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Entry 1 of 9

File: USPT

May 5, 1998

US-PAT-NO: 5747291

DOCUMENT-IDENTIFIER: US 5747291 A

TITLE: Bifunctional urokinase variants with improved fibrinolytic characteristics and thrombin inhibiting effect

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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2. Document ID: US 5637503 A

Entry 2 of 9

File: USPT

Jun 10, 1997

US-PAT-NO: 5637503

DOCUMENT-IDENTIFIER: US 5637503 A

TITLE: Plasmids, their construction and their use in the manufacture of a plasminogen activator

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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3. Document ID: US 5585257 A

Entry 3 of 9

File: USPT

Dec 17, 1996

US-PAT-NO: 5585257

DOCUMENT-IDENTIFIER: US 5585257 A

TITLE: Process for the production of human lysozyme

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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4. Document ID: US 5082767 A

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File: USPT

Jan 21, 1992

US-PAT-NO: 5082767

DOCUMENT-IDENTIFIER: US 5082767 A

TITLE: Codon pair utilization

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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5. Document ID: US 4897348 A

Entry 5 of 9

File: USPT

Jan 30, 1990

US-PAT-NO: 4897348
DOCUMENT-IDENTIFIER: US 4897348 A
TITLE: Recombinant materials and methods for producing human connective
tissue-activating peptide-III and analogs thereof

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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6. Document ID: US 4894333 A

Entry 6 of 9

File: USPT

Jan 16, 1990

US-PAT-NO: 4894333
DOCUMENT-IDENTIFIER: US 4894333 A
TITLE: Bovine interleukin-1.alpha.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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7. Document ID: US 4849350 A

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File: USPT

Jul 18, 1989

US-PAT-NO: 4849350
DOCUMENT-IDENTIFIER: US 4849350 A
TITLE: Novel DNA, production and use thereof

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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8. Document ID: US 4743553 A

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File: USPT

May 10, 1988

US-PAT-NO: 4743553
DOCUMENT-IDENTIFIER: US 4743553 A
TITLE: Synthetic genes for bovine parainfluenza virus

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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9. Document ID: US 4342832 A

Entry 9 of 9

File: USPT

Aug 3, 1982

US-PAT-NO: 4342832
DOCUMENT-IDENTIFIER: US 4342832 A
TITLE: Method of constructing a replicable cloning vehicle having
quasi-synthetic genes

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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File: USPT

Aug 3, 1982

US-PAT-NO: 4342832

DOCUMENT-IDENTIFIER: US 4342832 A

TITLE: Method of constructing a replicable cloning vehicle having quasi-synthetic genes

DATE-ISSUED: August 3, 1982

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Goeddel; David V.	Burlingame	CA	N/A	N/A
Heyneker; Herbert L.	Burlingame	CA	N/A	N/A

US-CL-CURRENT: 435/91.41; 435/320.1, 435/69.1, 435/69.2, 435/69.4, 435/69.51, 435/69.8, 930/120

CLAIMS:

We claim:

1. In the method of constructing a replicable cloning vehicle capable, in a microbial organism, of expressing a particular polypeptide of known amino acid sequence wherein a gene coding for the polypeptide is inserted into a cloning vehicle and placed under the control of an expression promoter, the improvement which comprises:

(a) obtaining by reverse transcription from messenger RNA a first gene fragment for an expression product other than said polypeptide, which fragment comprises at least a portion of the coding sequence for said polypeptide;

(b) where the first fragment comprises protein-encoding codons for amino acid sequences other than those contained in said polypeptide, eliminating the same while retaining at least a substantial portion of said coding sequence, the resulting fragment nevertheless coding for an expression product other than said polypeptide;

the product of step (a) or, where required, step (b) being a fragment encoding less than all of the amino acid sequence of said polypeptide;

(c) providing by organic synthesis one or more synthetic non-reverse transcript-gene fragments encoding the remainder of the amino acid sequence of said polypeptide, at least one of said fragments coding for the amino-terminal portion of the polypeptide; and

(d) deploying the synthetic gene fragment(s) of step (c) and that produced in step (a) or (b), as the case may be, in a replicable cloning vehicle in proper reading phase relative to one another and under the control of an expression promoter; whereby a replicable cloning vehicle capable of expressing the amino acid sequence of said polypeptide is formed.

2. The method of claim 1 wherein the cloning vehicle of step (d) is a bacterial plasmid.

3. The method of claim 2 wherein the synthetic fragment encoding the amino-terminal portion of the polypeptide additionally codes for expression of a specifically cleavable amino acid sequence, and wherein the fragments are deployed downstream from and in reading phase with expressed protein-encoding condons, whereby the conjugated

plasmid expression product may be specifically cleaved to yield the polypeptide.

4. The method of claim 2 wherein the amino acid sequence of the polypeptide is expressable unaccompanied by extraneous protein.
5. The method of claim 4 wherein the fragment of step (a) comprises at least a majority of the coding sequence for said polypeptide.
6. The method of claim 2 wherein a synthetic fragment and an mRNA transcript fragment are ligated to one another before their deployment in the cloning vehicle, and wherein the opposite ends of the fragment and of the transcript are variously single stranded or blunt so as to ensure ligation of the two fragments in the proper order for expression of said polypeptide.
7. The method of claim 5 wherein the polypeptide is human growth hormone, and wherein the first fragment comprises protein-encoding codons for amino acid sequences other than those in human growth hormone, and wherein elimination step (b) yields the Hae III restriction enzyme fragment of the first fragment.
8. The method of claim 7 wherein step (b) includes digestion of the Hae III fragment with a different restriction enzyme, cleaving away codons for untranslated messenger RNA and simultaneously providing a single-stranded terminus at one end of the resulting fragment.
9. The method of claim 8 wherein the second restriction enzyme is Xma I.
10. A method according to claim 1 wherein the polypeptide is human growth hormone and wherein the codons for amino acids 1-24 thereof are essentially as depicted in FIG. 1.
11. A method according to claim 4 wherein the polypeptide is human growth hormone and wherein the codons for amino acids 1-24 thereof are essentially as depicted in FIG. 1.
12. A method according to claim 7 wherein the codons for amino acids 1-24 are essentially as depicted in FIG. 1.

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